

REMARKS

The Final Office Action mailed July 5, 2005, has been received and reviewed. Claims 1 through 4 and 6 through 17 are currently pending in the application. Claims 1 through 4 and 6 through 17 stand rejected. Applicants propose to cancel claim 13, amend claims 1 and 14, and respectfully request reconsideration of the application as proposed to be amended herein.

35 U.S.C. § 102(e) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 6,399,415 to Bayan et al.

Claims 1 through 4 and 6 through 17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Bayan et al. (U.S. Patent No. 6,399,415). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims 1 through 4, 10 through 12 and 14

Claim 1 is proposed to be amended herein to recite a lead frame having an outer frame portion and a plurality of discretely defined leads, each of the plurality of discretely defined leads being cantilevered and extending inwardly from the outer frame portion. At least one of the discretely defined lead includes: a first bonding region, a second bonding region, and a severance region located between the first bonding region and the second bonding region, the severance region being configured to facilitate separation of the first bonding region from the second bonding region.

The Examiner cites Bayan as teaching “a plurality of discretely defined leads 200 and including at least one lead having, a first bond region (i.e., to the left of the notch), a second bonding region (i.e., to the right of the notch), and a severance region (i.e., notch located at 240) located between the first bonding region and the second bonding region, the severance region

being configured to facilitate separation of the first bonding region from the second bonding region.” (Final Action, pages 2 and 3). Additionally, with respect to the subject matter previously set forth in claim 13 (i.e., prior to the proposed cancellation of claim 13 and the proposed amendment of claim 1 herein), the Examiner states that “Bayan teaches an outer frame portion wherein the plurality of discretely defined leads is cantilevered and extends inwardly from the outer frame portion (see Fig. 7).” (Final Action, page 3). Applicants respectfully traverse this rejection.

Bayan describes a lead frame (204) having a plurality of leads or contacts (209) and a die attach pad 207. The “[t]ie bars 240 are also defined to support the desired surface features.” (Col. 5, lines 17-18). While the Examiner cites the component associated with reference numeral 240 as corresponding with a severance region between bonding regions, Applicants note that the component identified by reference numeral 240 is a tie bar which defines the outer periphery of each lead frame and structurally supports the leads (209) thereof. Thus, among other things, the tie bar (240) defines a boundary between *individual lead frames* (202) and, thus, between the leads of one lead frame and the leads of another, adjacent lead frame, as is clearly shown in FIGS. 7 and 8.

The tie bar (240) is clearly not a severance region located between the first bonding region and the second bonding region of *a discrete lead*, which lead is cantilevered and extends inwardly from the outer frame portion. In other words, if, as the Examiner asserts, the portion to the left of the “notch 240” is a first bonding region, and the portion to the right is a second bonding region (see Final Action, pages 2-2), Bayan then fails to teach that either end of such a “lead” is cantilevered from an outer frame portion such that the “lead” extends inwardly therefrom.

In short, Bayan does not describe a discrete lead (including the components of a first bonding region, a second bonding region and severance region therebetween) being cantilevered and extending inwardly from the outer frame portion.

Applicants, therefore, submit that claim 1 is clearly allowable over Bayan. Applicants further submit that claims 2 through 4, 10 through 12 and 14 are allowable as being dependent

from an allowable base claim as well as for the additional patentable subject matter introduced thereby.

With respect to claim 3, Applicants submit that Bayan fails to describe each of the plurality of discretely defined leads being cantilevered and extending inwardly from a frame portion while also including a first bonding region, a second bonding region, and a severance region configured to facilitate separation of the first and second bonding regions.

Applicants, therefore, respectfully request reconsideration and allowance of claims 1 through 4, 10 through 12 and 14.

Claims 6 through 9 and 15 through 17

Independent claim 6 is directed to a lead frame strip that comprises: a plurality of longitudinally arranged lead frames, each lead frame including an outer frame portion bearing a plurality of inwardly extending, cantilevered leads, each lead of the plurality having thereon at least two longitudinally spaced locations separated by a severance region comprising a notch extending laterally across each lead.

The Examiner cites Bayan as teaching a plurality of longitudinally arranged lead frames (in FIG. 1A), with “each lead frame including an outer frame portion bearing a plurality of inwardly extending, cantilevered leads each lead of the plurality having thereon at least two longitudinally spaced locations separated by a severance region comprising a notch (i.e., located at 240) extending laterally across each lead 209.” (Final Action, page 3). Applicants respectfully disagree.

As set forth hereinabove, Bayan describes a lead frame (204) having a plurality of leads or contacts (209) and a die attach pad 207. The “[t]ie bars 240 are also defined to support the desired surface features.” (Col. 5, lines 17-18). Applicants note that the component identified by reference numeral 240 is a tie bar which defines the outer periphery of each lead frame and structurally supports the leads (209) thereof. Thus, among other things, the tie bar (240) defines a boundary between *individual lead frames* (202) and, thus, between the leads of one lead frame and the leads of another, adjacent lead frame, as is clearly shown in FIGS. 7 and 8.

However, it appears that the Examiner is relying on Bayan's tie bar (240) as being both an "outer frame portion" and a "severance region" as recited by claim 6. On the contrary, it is clear that the tie bar (240) is not a severance region located *between the first bonding region and the second bonding region* of a lead which is cantilevered and extends inwardly from the outer frame portion (i.e., from Bayan's tie bar (240)). In other words, if, as the Examiner asserts, the portion to the left of the "notch 240" is a first bonding region, and the portion to the right is a second bonding region (see Final Action, pages 2-2), Bayan then fails to describe either end of such a "lead" being cantilevered from an outer frame portion such that the "lead" extends inwardly therefrom.

Applicants, therefore, respectfully submit that claim 6 is clearly allowable over Bayan. Applicants further submit that claims 7 through 9 are also allowable at least by virtue of their dependency from an allowable base claim.

Applicants respectfully request reconsideration and allowance of claims 6 through 9.

ENTRY OF AMENDMENTS

The proposed amendments to claims 1 and 13 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

CONCLUSION

Claims 1 through 4, 6 through 12 and 14 through 17 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bradley B. Jensen", with a long horizontal flourish extending to the right.

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